

I claim:

1. A non-return valve for a pump, comprising a receptacle in which a valve seat is implemented, a closing body and a cage element in which the closing body is disposed, whereby the cage element is bipartite, comprising a guide element and a stop element and the guide element is made from a material having a lower modulus of elasticity than a material of the stop element.
2. The non-return valve according to Claim 1, wherein the guide element is made from plastic or aluminum and the stop element from steel.
3. The non-return valve according to Claim 1, wherein the guide element is implemented as a sleeve and has at least one overflow passage on its inner circumference.
4. The non-return valve according to Claim 1, wherein the stop element is press-fit into the guide element.
5. The non-return valve according to Claim 1, wherein a spherical indentation is implemented in the stop element.
6. The non-return valve according to Claim 1, wherein the stop element has two, three or four areas of connection to the guide element.
7. The non-return valve according to Claim 1, wherein, in the assembled state, the stop element adjoins a mating surface which is implemented on a valve housing.

8. The non-return valve according to Claim 1, wherein grooves to accommodate the stop element are implemented in the guide element.
9. The non-return valve according to Claim 9, wherein recesses for ensuring pressure compensation are implemented in the grooves.

10. A method for delivering fuel for a common rail injection system comprising the steps of:
 - providing a high-pressure pump for delivering fuel for a common rail injection system;
 - providing a non-return valve for the high pressure pump, wherein the non-return valve comprises a receptacle in which a valve seat is implemented, a closing body and a cage element in which the closing body is disposed, whereby the cage element is bipartite, comprising a guide element and a stop element and the guide element is made from a material having a lower modulus of elasticity than a material of the stop element.
11. The method according to Claim 10, wherein the guide element is made from plastic or aluminum and the stop element from steel.
12. The method according to Claim 10, wherein the guide element is implemented as a sleeve and has at least one overflow passage on its inner circumference.
13. The method according to Claim 10, wherein the stop element is press-fit into the guide element.
14. The method according to Claim 10, wherein a spherical indentation is implemented in the stop element.
15. The method according to Claim 10, wherein the stop element has two, three or four areas of connection to the guide element.
16. The method according to Claim 10, wherein, in the assembled state, the stop element adjoins a mating surface which is implemented on a valve housing.

17. The method according to Claim 10, wherein grooves to accommodate the stop element are implemented in the guide element.
18. The method according to Claim 17, wherein recesses for ensuring pressure compensation are implemented in the grooves.